



RHINO HEALTH: OF PACHYDERMS AND PEOPLE



RHINOS IN PERIL

Rhinoceroses are ancient beasts, having changed little in the past 30 million years. Some say they are at the end of their evolutionary time, but the world's five species remain remarkably adapted to life on earth – except for their vulnerability at the hand of man.

The highly endangered Sumatran rhino lives in the rainforests of Indonesia and Malaysia. With these forest rhinos hovering at approximately 100 individuals, they are threatened by logging, the oil palm industry and potentially from diseases spread by domestic livestock.

In Africa, rhinos are under intense poaching pressure. The best tools to counter the current demand for horn are

intensive protection and, when needed, translocation of animals to areas that can be more effectively secured. At the same time, the demand for rhino horn in Asia must be curtailed.

Cornell teams are working in both Asia and Africa to mitigate disease threats to wild rhinos and to improve translocation outcomes.

HANGING BY A THREAD

Given the significant poaching pressure in Africa, a team from Cornell is helping local wildlife veterinarians and managers develop new methods for rhino capture, anesthesia monitoring and translocation – all critical for a

sustained fight to secure a future for these extraordinary animals.

Increasingly, rhinos are being moved to safety by slinging them upside down under a helicopter, based on physiological research pioneered by Cornell veterinarians. Namibia is now employing the technique, which appears to be the safest way to move an anesthetized rhino out of rugged terrain. Preliminary findings suggest the rhino breathes just as well as if it were placed on its side.

HEALTH MATTERS

Only 60 Javan rhinos remain on the planet – confined to one population in Indonesia. In such a small group, health matters. Tsunamis, sea level rise, climate change and human activities all threaten the Javan rhino.

In addition, in Ujung Kulon National Park where the last Javan rhinos live, local domesticated water buffalo carry

dangerous blood parasites and a range of other potential pathogens. Given the decades-old practice of intentionally moving the buffalo into the park for grazing, water and shelter, risks to the rhinos' health are high.

RHINO HEALTH UNIT: A FIRST!

Scientists in Indonesia have taken action – they've started a Rhino Health Unit, the first of its kind in their country and perhaps the world. Cornell's team offers essential guidance to the Unit by facilitating research and providing technical support. Cornell mentoring of young professionals is already yielding success: a new generation of leaders is poised to take the reins of Indonesian rhinoceros conservation at a critical juncture.

A second home for the Javan rhinos is being developed outside Ujung Kulon, and a plan is underway to safely capture remaining, isolated Sumatran rhinos to bring them together to enhance prospects for better breeding and protection.



R. Radcliffe